ABSTRACT OF THE DISCLOSURE

This invention relates to immunological reagents and methods specific for a mammalian, transmembrane protein termed Pgp, having a non-specific efflux pump activity established in the art as being a component of clinically-important multidrug resistance in cancer patients undergoing chemotherapy. The invention provides methods for developing and using immunological reagents specific for certain mutant forms of Pgp and for wild-type Pgp in a conformation associated with substrate binding or in the presence of ATP depleting agents. The invention also provides improved methods for purifying hematopoietic stems cells expressing Pgp and diagnostic and therapeutic methods for cancer cells expressing Pgp.

McDonnell Boehnen Hulbert & Berghoff, Ltd.
300 South Wacker Drive, Seventh Floor
Chicago, Illinois 60606
(312) 913-0001